The Valley Megaphone

IEEE — Phoenix Section

IEEE

Executive Committee – 2012

Chair
Ralph Hogan, 480-774-8227
rhogan@ieee.org

Vice Chair
Charles Weitzel, 480-292-0531
c.weitzel@ieee.org

Secretary
Barbara McMinn 602-371-6383
barbara.mcminn@aps.com

Treasurer
Bruce Ladewig, **480-620-9291**
bruceladewig@ieee.org

Past Chair
Jim Hudson, 480-855-8987
jim.hudson@srpnet.com

Publicity
Surinder Tuli, 480-554-8275
Surinder.tuli@gmail.com

PACE
Mike Andrews, 602-682-5440
m.andrews@ieee.org

Membership
Vasudeva P. Atluri
480-227-8411
vpatluri@ieee.org

Student Activities
S.Diane Smith
602-749-4601
sdianesmith@computer.org

Conferences
Guoliang Xue
480-965-6218
xue@asu.edu

Awards
Vasudeva P. Atluri
480-227-8411
vpatluri@ieee.org

Inter-Society
Mike Andrews, 480-991-1619
m.andrews@ieee.org

Webmaster
Krishna Bharath **480-552-8913**
kbharath@ieee.org

In this Issue of the Valley Megaphone:
Table of Contents
(*click on an item to go directly to it*)

IEEE Phoenix Section on-line updates can be found at http://ewh.ieee.org/r6/phoenix/ **and on LinkedIn at:** http://www.linkedin.com/groups?gid=2765918 **Please send announcements for the** *Valley Megaphone* **to Surinder Tuli at** surinder.tuli@gmail.com **and to Russ Kinner at** r.kinner@ieee.org **for inclusion in the Section Calendar.**

The IEEE Banquet pictures are up, see http://ewh.ieee.org/r6/phoenix/index.php

Chapters

Signal Processing & Communications
David Frakes, 480-727-9284
dfrakes@asu.edu

Computer Society
Jerry Crow
jerry.crow@computer.org

CPMT Society
Vasudeva P. Atluri
480-227-8411
vpatluri@ieee.org

Education Chapter
Martin Reisslein, 480-965-8593
reisslein@asu.edu

EMBS Chapter
TBD

EMC Society
Harry Gaul, 480-441-5321
harry.gaul@ieee.org

GOLD
Chaturvedi Gogineni
cgoginen@asu.edu

Power & Energy Society
Scott Freymuller 480-991-9191
scott@youngpower.com

Solid State Circuits
Mohamed Arafa
mohamed.arafa@ieee.org

Teacher-In-Service
John Purchase
jpurchase@cox.net

Waves & Devices Society
Steve Rockwell
steve.rockwell@ieee.org

Life Members
Barry Cummings
abarrycummings@gmail.com

Women In Engineering
Shamala Chickamenahalli
shamala.chickamenahalli@intel.com

The Valley Megaphone is the newsletter of the Phoenix Section of the Institute of Electrical and Electronics Engineers. It is published monthly and reaches about 4000 members. Submit articles, advertisements, and announcements to Surinder Tuli at the above email address. Deadline for announcements and dvertisements is the third Friday of the month prior to publication. Advertising Rates: Full page: $200, 3/4page: $125, ½ page: $75, 1/3 page: $50, 1/4 page: $25. Change of address/email? Call toll free 1-800-678-IEEE. Please allow 6-8 weeks.   Section Web Page is: http://ewh.ieee.org/r6/phoenix/

U – News

(for Student Members)

Updates of Student Advisors and Committee Members

Each Student Branch noted on the right side of this page should review current information on Advisors and Student Committee Members and forward to my attention within this week, as we are reviewing contacts for reporting and activities including Student Monthly Meetings.

S. Diane Smith
602-749-4601
sdianesmith@computer.org
Student Activities Chair

Student Branches

ASU Main, Engineering
Chair: Ahmet Durgun,
480-371-7743, **adurgun@asu.edu**
Advisor: Cihan Tepedelenlioglu,
480-965-6623, **cihan@asu.edu**

ASU Main, Computer Society
Chair: TBD
Advisor: Guoliang Xue
480-965-6218, **xue@asu.edu**

ASU Polytechnic
Chair: TBD
Advisor: TBD

DeVry, Phoenix
Chair: Donovan Benedict
Don4ben5@gmail.com
Advisor: Diane Smith
dsmith2@devry.edu

DeVry, Computer Society
Chair: TBD
Advisor: Diane Smith
dsmith2@devry.edu

NAU, Engineering
Chair: TBD
Advisor: Niranjan Venkatraman
v.niranjan@ieee.org

Embry-Riddle, Prescott
Chair: Tim Lemm
timothy.lemm@erau.edu
Advisor: John E. Post
postj@erau.edu

U – Newsbytes

ASU Polytechnic is currently seeking Advisor for the Student Branch. Please email Nick (at email address above) with Recommendations.

Start your own MicroMouse and compete for cash prizes!
The Section has a full tournament sized MicroMouse maze. Funding for your project may be available. For details contact the Section Student Activities Chair, S. Diane Smith sdianesmith@computer.org

- View pictures from the MicroMouse contest at the Southwest Area Spring 2010 meeting at http://picasaweb.google.com/ieeegoldphx/2010IEEESWASpringMeeting (photography by David Huerta, GOLD Affinity Group Chair)

Signal Processing & Communications Society

Thanks to all of the attendees who have made this year's technical meetings so successful. More to come in the coming months…

Please contact Chapter Chair David Frakes (dfrakes@aso.edu) to volunteer or propose a speaker for upcoming meetings.

CPMT- Packaging and Manufacturing Technology Society

IEEE Components, Packaging and Manufacturing Technology Society
Wednesday, June 20th, 2012 at 6 PM

Electronics cooling advancements, challenges and innovation needs
Dr. Ioan Sauciuc

Senior Engineer with Intel Corporation at Intel Corporation Chandler AZ 85226

ABSTRACT:
The primary focus of the thermal management in microelectronics applications is to keep the die junction temperature below acceptable limits in order to ensure device performance and package reliability at an acceptable cost. Despite the fact that the fundamental theories (i.e. forced convection, two-phase flow, radiation, etc.) are somehow matured many market segments are still limited by thermals since they are not feasible due high cost, large form factor and low reliability. The current conventional air cooling technologies present diminishing returns, thus it is strategically important for the microelectronics industry to establish the research and development focus for future technologies to accommodate the road map for semiconductors. This paper will first present current thermal performance capability for enabling and package based cooling technologies using a range of "reasonable" boundary conditions. Research advancements and most important building blocks cooling performance will be presented as following: (1) passive and active liquid/vapor phase change, (2) high conductivity materials, (3) cold plate liquid cooling optimization strategy, (4) thermoelectric cooling extension, and (5) piezo technology updates and challenges. This paper will also be a call for the industry to address the challenges to implement some of these technologies in high volume and address the integration enabling challenges.

BIOGRAPHY:
Dr. Ioan Sauciuc is a Senior Engineer with Intel Corporation. He has a PhD in heat transfer with more than twenty two years of experience in the thermal/heat transfer industrial and research areas working in 6 countries. He obtained his at RMIT (Royal Melbourne Institute of Technology). After completing his Ph.D., he held teaching, applied research and engineering positions at the RMIT, Fujikura Ltd and Intel Corporation.

Dr. Ioan Sauciuc is internationally known for his innovative work in electronics CPU cooling and heat transfer. He has published extensively on these topics and has more than 50 patents issued in Japan and USA and more than 20 applications under process. Dr. Sauciuc was the Secretary of the 5th International Heat Pipe Symposium and multiple times a Panel Judge for the National Science Foundation. He has been for more 10 years member of the Industrial Advisory Board for the Cooling Technology Research Consortium and reviewer for some leading journals. He has co-edited *Heat Pipe Technology , Theory , Applications and Process* and published more than 50 papers. Dr. Sauciuc was part of the RMIT team who won the Australia - National Energy Award. He has presented key note lectures, chaired and co-chaired at numerous conferences.

Date: Wednesday, June 20th , 2012
Location: Group Conference Room, Freescale Semiconductor, Inc., 2100 E. Elliot Rd. Tempe, AZ. Enter the facility through the Main (South) lobby in building 94, by the flag poles; you will be escorted to the meeting venue.
Time: 5:30–6:00 Social/Refreshments, 6:00–7:00 Presentation, 7:00 Dinner
                    (Pizza and Soda will be provided by the IEEE CPMT Phoenix Chapter)

IEEE members and non-members are all welcome to attend. Those who plan to attend should be at the facility entrance no later than 6:00 pm, as there will be no escorts available after that.

For more information, please contact any of the following CPMT officers:
Surinder Tuli (480) 554-8275   Vasu Atluri (480) 227-8411
Vivek Gupta (480) 413-5849   Mahesh Shah (480) 544-9438
David Dougherty (480) 413-6923

CPMT Phoenix Chapter

IEEE CPMT Society Phoenix Chapter is seeking volunteers to serve as Chapter Officers during remaining of 2012. One has to be a member of IEEE CPMT Society to serve as the IEEE CPMT Society Phoenix Chapter Officer. If interested, please contact Dr. Vasudeva P. Atluri, Chair, IEEE CPMT Society Phoenix Chapter, by sending an email to vpatluri@ieee.org.
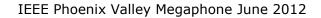
Power & Energy Society

IEEE Power and Energy Society
Phoenix Chapter
http://ewh.ieee.org/soc/pes/phoenix/

News and Announcements:

- We are on vacation for the summer: there are no luncheons in June, July, or August. Our next luncheon will be Thursday, September 20th, at the SRP PERA Club.

- Don't miss our **55th Annual PES Golf Tournament**, which will be held on Saturday, October 13th, at the Antelope Hills Golf Club in Prescott. This is our annual fundraising event, allowing us to sponsor scholarships, student outreach programs, and, of course, our $5 luncheons and technical seminars.

- At the IEEE Phoenix Section Annual Award Banquet, the Phoenix PES Chapter was named the Outstanding Chapter for 2011. We would like to thank everyone who supports our Chapter by sponsoring and participating in our annual golf tournament and by attending our monthly luncheons.

- We are pleased to announce that our Chapter sponsored a $1000 electrical engineering scholarship, which was awarded by the IEEE Phoenix Section in February. The deadline for the next round of scholarships is January 2013. For more details, see the Section website.

- Want to know more about IEEE Power and Energy Society? Watch this video:
    - http://www.youtube.com/watch?v=BRKM4lpo_tk
    - More videos are available at: http://ieee-pes.org/outreach/pes-informational-promotional-videos

- Have you considered becoming a Senior Member of IEEE? It's not as difficult as you think. Basically, you need ten years of professional experience, and your bachelor's degree counts for three of those years. Find out more at: http://www.ieee.org/membership_services/membership/senior/index.html

Solid State Circuits Society

INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS

Next Updates coming soon

Life Member Affinity Group

⬥IEEE **Phoenix Section Life Member Affinity Group**
Celebrating 125 Years
of Engineering the Future

Technical Meeting

Topic: October TBD
When: Tuesday, October 16, 2012, 11:00am – 1:00pm Registration fee is $15.
Where: SRP's **PERA Club** Bighorn Room,
1 East Continental Drive, Tempe, AZ
West of 68th St., ½ mile south of McDowell Road

RSVP: Please respond to Program Chair, Ronald Sprague by email:
rlsprague@q.com at least a few days before the meeting.

The Program Chair is seeking suggestion from members for future technical presentations. Any ideas of interest are open for consideration. Please contact Ronald Sprague Program Chair at rlsprague@q.com or any officer with ideas.

About IEEE Phoenix Section Life Member Affinity Group:

The IEEE Phoenix Section Life Member Affinity Group was organized to enable IEEE Life Members to retain active IEEE associations, contribute to the social good in their communities, advance IEEE's professional interests and enjoy each other's company.

An IEEE member automatically becomes an IEEE "Life Member" status when at least 65 years of age and the sum of your current age and years of membership is 100. For more details use the link

http://www.ieee.org/web/volunteers/mga/home/life_members_committee/index.html

Activities: Annual technical meetings scheduled in February, May, October, and December. Elections are held at the December meeting.

Technical meeting topics and suggested speakers are encouraged. Contact any Officer.

Future Technical Meetings:

- Tuesday, October 16, 2012   SRP PERA CLUB
- Tuesday, December 4, 2012   SRP PERA CLUB

Officers:

Chair	A. Barry Cummings	Barry.Cummings@srpnet.com
Vice Chair	Michel Ebertin	Michel@ebertin.net
Secretary	Tom Lundquist	Tom.Lundquist@ieee.org
Treasurer	Leslie Daviet II	lesdavietii@cs.com
Program Chair	Ronald L. Sprague, P.E.	rlsprague@q.com
Past Chair	C Bruce Johnson	cbj@johnsonscientificgroup.com

Women in Engineering Affinity Group

The IEEE Phoenix Section **Women in Engineering (WIE) Affinity Group (AG)** met on May 31st at ASU. Hang Nguyen, Senior Principal Engineer in the Intelligent Systems Group at Intel Corporation spoke to the 14 attendees. Ms. Nguyen was the lead architect for Intel's first Embedded XEON-class processor with PCI-Express and storage acceleration integration. On Thursday night she gave an introduction to the Intel Intelligent Systems Group and its products, focus and direction. She also discussed her career journey and lessons learned. Thank you to Ms. Nguyen for sharing with us.
WIE is also looking for female engineers who would like to support the Arizona Science Lab (ASL) by sharing their love of science and engineering with students in grade 4 through 9 on June 20th at the Meyer School in Tempe. If you are interested in inspiring the next generation of engineers and serving as an example for young girls, please contact Shamala Chickamenahalli (email below) by June 5th.

If you would like to be added to our distribution list for further information about this and future events, please contact Diane Watkins (diane.watkins@srpnet.com).

If you would be interested in helping to organize any of our activities or have suggestions for other activities or speakers for future events, please feel free to contact any of our organizing committee members:

> Chair: Shamala Chickamenahalli (shamala@ieee.org)
> Vice-Chair: Joy Harris (jharris@exponent.com)
> Secretary / Publicity: Diane Watkins (diane.watkins@srpnet.com)
> Treasurer: Diane Smith (diane@web-oasis.com)
> Web Master: Audrey Skidmore (ASkidmore@azmag.gov)
> Membership: Lesley Polka (lesley.a.polka@intel.com)
> Region 6 Liaison: Barbara McMinn (barbara.mcminn@aps.com)

The IEEE WIE Affinity Group's mission is to inspire, engage, encourage and empower IEEE women worldwide with a vision of creating a community of IEEE women and men innovating the world of tomorrow. More information about IEEE WIE can be found at: http://www.ieee.org/membership_services/membership/women/women_about.html.

Computer Society

Phoenix Chapter of the IEEE Computer Society

June, 2012

News

- We continue to build our program schedule for the remainder of the year. We have confirmed speakers for July and September (see below) and a tentative program for November.

- We are planning a chapter picnic for November. The picnic will be at Desert Breeze park in Chandler and will be held on Saturday, November 17th. More details will be forthcoming.

- Chapter elections for officer positions for 2013 will be held at the chapter meeting in November. If you are interested in an officer position in 2013 please contact one of the current officers.

Future Events

- July 11 – Chapter meeting, DeVry University, speaker Dr. Diane Smith, "The History of Unix"

- September 12 – Chapter meeting, DeVry University, speakers Dr. Steve Miller, Don Willey, MCS, "Integrating GPS from a Software Perspective".

- November 7 – Chapter meeting, DeVry University, speaker TBD

- November 17 – Chapter Picnic, Desert Breeze Park, Chandler.

Meetings start at 6:00 pm with networking and light refreshments followed by the presentation at 7:00 pm. DeVry University is located at 2149 W Dunlap Avenue, Phoenix.

Visit the CS Chapter website for the latest information: http://ewh.ieee.org/r6/phoenix/compsociety/.
For brief announcements regarding upcoming events we are also on Twitter: @IEEECS_PHX

If you would like to suggest a topic or speaker for any of our future meetings, please contact one of the chapter officers:

> Jerry Crow (jerry.crow@computer.org)
> Brad Morantz (bradscientist@ieee.org)
> Audrey Skidmore (askidmore@computer.org)
> Diane Smith (sdianesmith@computer.org)

Wave and Devices

Next Updates coming soon

IEEE 2012 Membership – Join/Renew

The Arizona Science Lab

THE ARIZONA SCIENCE LAB

www.arizonasciencelab.org

Future Rocket Scientist Seeks Experience

Yours

An Invitation to Engineers & Scientists

Dozens of engineers & scientists are working to make a difference for valley 4th through 9th grade students at the Arizona Science Lab. Come join us. Just a few hours can change a child's life - and yours!

Help us to spark an interest in science & engineering careers. Volunteers are needed to teach or help students perform the experiments and construct projects that will make science come alive for them.

Comprehensive training and orientation are provided. The Arizona Science Lab has excellent equipment and a spacious facility:

The Meyer School, 2615 S. Dorsey Lane, Tempe, AZ

RSVP or more details, please contact Jane von Schilling at (623) 256 - 8294 or jvonschilling@gmail.com

THE ARIZONA SCIENCE LAB

www.arizonasciencelab.org

Sponsors: IEEE Teacher in Service Program, Tempe Elementary School District 3, Nina Mason Pulliam Charitable Trust, SRP, APS Foundation

2012 IEEE Phoenix Section Calendar

The calendar is updated by the Vice Chair on a rolling basis.
TBD

 You may access the IEEE Phoenix Section Calendar of Events at:

http://ewh.ieee.org/r6/phoenix/Calendar.htm

For inputs and updates to the Calendar, please contact the IEEE Phoenix Section

Charles Weitzel, 480-292-0531 c.weitzel@ieee.org

- June 2012
    - Review meeting schedules of Chapters
    - Nominations received by Nominating Committee
- July–August 2012
    - Summer break
- September 2012
    - Student Branches send annual plan of activities to IEEE
    - Annual Banquet: Determine date, confirm hotel, speaker
    - Announcement of Student Paper Contest
    - Announcement of Student Scholarships
    - Call for nominations for awards
        - Categories: Young Engineer/GOLD, Engineer, Company, Educator

Executive Committee Meeting
Phoenix Section

Venue: Phoenix Airport Hilton 2435 S 47th St, Phoenix, AZ, 85034 (map)
Tel.: 480-804-6017

More Info: Meetings are held on the first Tuesday of the month, 6–8 PM.
- Except for July & August

All interested IEEE members are welcome to attend.

Contact: Ralph Hogan, 480-774-8227
rhogan@ieee.org

Tuesday, June 5, 2012, 6–8 PM
Hilton Phoenix Airport, 2435 South 47th Street, Phoenix, AZ 85034

Agenda
Agenda
- Section Officer Reports
  - Vice Chair – Chuck Weitzel: Calendar of Activities
  - Secretary – Barbara McMinn: Meeting Minutes
    - May Meeting Minutes
  - Treasurer – Bruce Ladewig : Monthly report
    - May Monthly Report
  - Past Chair – Jim Hudson
- Society Chapter and Affinity Group Reports
  - Components, Packaging and Manufacturing Technology (CPMT) – Vasu Atluri
  - Computer Society (CS) – Jerry Crow
  - Education Society (EdSoc) – Martin Reisslein
  - Electromagnetic Compatibility (EMC) – Harry Gaul
  - Engineering in Medicine and Biology Society (EMBS) – TBD
    - Contact Society, invite Members, identify Interim Chair
  - Graduates of the Last Decade (GOLD) – Chaturvedi Gogineni
  - Life Members Affinity Group (LMAG) – Barry Cummings
  - Phoenix Area Consultants Network (PACN) – Ron Sprague
  - Power & Energy Society (PES) – Scott Freymuller
  - Signal Processing & Communications (SP/Com) – Pavan Turaga <pturaga@asu.edu>
  - Solid State Circuits Society (SSCS) – Mohamed Arafa
  - Waves & Devices (WAD) – Steve Rockwell
  - Women in Engineering (WIE) - Shamala Chickamenahalli
- Student Branch Reports [Advisor]
  - Student Activities Chair – Diane Smith
  - ASU Main, Engineering – Saurabh Naik [Cihan Tepedelenlioglu]

- o ASU Main, Computer Society – Nicholas Vaidyanathan [Guoliang Xue]
- o ASU Polytechnic – TBD [TBD]
- o DeVry, Phoenix –Diane Smith
- o DeVry, Computer Society – Donovan Benedict

- o Embry Riddle – Tim Lemm [John E. Post]
- o NAU, Engineering – Kenji R. Yamamoto [Niranjan Venkatraman]
- o NAU, Computer Society – TBD [TBD]
- Standing Committee Reports
  - o Awards – Vasu Atluri
  - o Inter-Society & Professional Activities Committees for Engineers (PACE) – Mike Andrews
  - o Membership – Vasu Atluri
  - o Phoenix Conferences – Guoliang Xue
  - o Publicity – Surinder Tuli
  - o Teacher In-Service Program (ASL)– John Purchase
  - o Web –Krishna Bharathkrishna
- New Business
- Adjourn

IEEE Membership Grade Advancement

IEEE Phoenix Section Executive Committee encourages all to apply for advancement in membership grade to Senior Member and Fellow Grade. Please review the requirements at www.ieee.org. Please contact IEEE Phoenix Section Membership Development Chair, Dr. Vasudeva P. Atluri, at vpatluri@ieee.org for additional information.

Enhanced Senior Member Application Launched

Effective 29 July 2011, IEEE Admission and Advancement launched a new Senior Member Application. The new application includes numerous enhancements, based on feedback from volunteers and members, including:

- New user friendly format / design
- Secure environment (need IEEE Web account)
- Ability to save application in "draft" form
- Ability to upload resume or Curriculum Vitae (up to 3 MB)
- Applicant can view application online
- Applicant can view status of requested reference forms
- References will be notified by email to provide applicant reference
- References will have the ability to view their completed reference form(s)
- Real time application status

The goal is to provide prospective Senior Members with an easy to use and intuitive interface, while streamlining internal operations at the same time. View the new Senior Member application.

IEEE-USA Government Fellowships:

Each year, IEEE-USA sponsors three qualified IEEE members to serve as government fellows: one Engineering & Diplomacy Fellow and two Congressional fellows. The fellows spend a year in Washington, serving as advisers to the U.S. Congress or key U.S. Department of State decision-makers. IEEE-USA's Government Fellowships link engineers with government, providing a mechanism for IEEE-USA members to learn firsthand about the public policy process through personal involvement.

The congressional fellowship consists of an appointment to the personal staff of a U.S. Senator or Congressman, or to the professional staff of a Congressional Committee. The Fellow along with the Congressional sponsor and IEEE-USA, negotiates a starting date, although IEEE-USA recommends that Fellowship terms run from January 1st to December 31st. For an application Kit for the 2013 Congressional Fellowship Program, visit:

http://ieeeusa.org/policy/govfel/documents/cfappkit13_000.doc

The State Department fellowship begins in January of each year and offers an opportunity for an engineer to provide technical expertise to the State Department, and help raise awareness of the value of engineering input while learning about and contributing to the foreign policy process. For an application Kit for the 2013 Engineering & Diplomacy (State Department) Fellowship Program, visit: **http://ieeeusa.org/policy/govfel/documents/Stateappkit13.doc**

The postmark application deadline for 2013 Fellowships is 16 March 2012. For more information, visit: **http://www.ieeeusa.org/policy/govfel/default.asp**

Washington Internships for Students of Eng'g (WISE)

SUMMER 2012 PROGRAM Monday, 4 June - Friday, 3 August:

WISE seeks applications from outstanding engineering students who display evidence of leadership skills and have a keen interest in public policy. Minority students are encouraged to apply.

Applicants should select a sponsoring society(s), fill out an application form, write two (2) brief essays in response to questions, arrange for two (2)faculty references, and forward an official transcript. The deadline for Summer 2012 applications is December 31, 2011. For more info and application forms, please visit: **http://wise-intern.org/application/index.html**

"…one of the best summers of my life. One which truly transformed my dreams and goals. ….when I left D.C. I really wanted to instill in my fellow engineers the appreciation of the interaction between public policy and engineering." -- Marc Canellas, WISE 2011

Erica R. Wissolik
Program Manager, Government Relations
IEEE-USA
2001 L Street, NW, Suite 700
Washington, DC 20036
202 530 8347 direct | 202 785 0835 fax
e.wissolik@ieee.org | **www.ieeeusa.org**

Section Officers Election/Job Descriptions

Updates coming soon

IEEE USA E Book on Transition

IEEE-USA E-Book on Transition from School to Work to be Offered Free as Special Benefit to IEEE Members

WASHINGTON (31 October 2011) -- As a special benefit of IEEE membership for November, IEEE-USA is offering a free e-book, "Engineer's Guide to Lifelong Employability: The Transition from School to Work." This e-book, prepared by the IEEE-USA Employment and Career Services Committee, provides a road map for the student preparing to enter the job market -- what employers are looking for, how they can best find a job and what career paths are open to a new grad. Topics include:

* Finding a Job the Old-Fashioned Way
* Networking
* The Campus Interview
* Making up Your Mind
* Four Career Paths
* Business -- Big or Small?
* A Non-Technology Company

"Demand for new BSEEs may be soaring, but so are employer's standards and expectations," writes Jean Eason, IEEE-USA Employment and Career Services Committee member. "Good grades and technical expertise aren't enough anymore."

From Nov. 1 through Nov. 30, "Engineer's Guide to Lifelong Employability: The Transition from School to Work" can be downloaded at www.ieeeusa.org/communications/ebooks for free to IEEE Members. The nonmember price is $5.99. Members can purchase other IEEE-USA E-Books at deeply discounted prices and download other free e-books. In December the free publication will be book three in the "Engineer's Guide to Lifelong Employability" series: "What Are You Worth?"

Phoenix Section LinkedIn Group

If you are interested in professional networking and shared Section related updates & discussions join the [IEEE Phoenix Section Group on LinkedIn](#). Signing up only takes minutes and is free. A job board is available as well.